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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,577	04/21/2000	Jon Faiz Kayyem	A-63761-S/RFT/RMS/RMK	6551

7590

07/01/2002

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EXAMINER

MARSCHÉL, ARDIN H

ART UNIT

PAPER NUMBER

1631

DATE MAILED: 07/01/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/557,577

Applicant(s)
Kayyem et al.

Examiner
Ardin Marschel

Art Unit
1631



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 9, 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 47-59 is/are pending in the application.
- 4a) Of the above, claim(s) 54-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 47-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 47-59 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Apr 21, 2000 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) 22 pages (5 sheets) 6) ☐ Other:

Applicants' election without traverse of Group VI, species ETM attached moiety (Claims 47-53) in Paper No. 7, filed 1/2/02, is acknowledged.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 47-53 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Meade et al. (WO 95/15971).

The abstract of Meade et al. directs the disclosure therein to electron transfer practice with electron acceptors and donors (both ETMs) attached to the backbone of nucleic acids. On page 14, lines 15-30, the nucleic acid definition is broadly set forth to include peptide nucleic acids as instantly claimed. The attachment of backbone to ETM is deemed an attachment to the α -carbon therein either directly or indirectly. Both direct and indirect attachments are deemed included within the scope of the

instant claims due to a lack of limitation regarding that issue as well as citations to clearly indirect attachments as in instant claim 49. Additionally, transition metal complexes are included as cited initially on page 15, lines 14-16, and completely on page 16, lines 17-21. ETMs being electrodes is disclosed on page 34, lines 3-9. Thus, the instant claims are anticipated.

Claims 47-53 are rejected under 35 U.S.C. § 102(e) as being unpatentable over Megerle (P/N 5,874,046).

Megerle describes a sensor system wherein probes are utilized with electron transfer moieties at the termini, such as Ruthenium and include peptide nucleic acids in their definition of probe in column 5, lines 25-42, equivalent to the above Meade et al. disclosure. Electrodes as ETMs are disclosed in column 9, lines 59-65. Transition metal complexes are also cited in Megerle at column 12, lines 44-67.

The following applications have been listed on IDS disclosures but cannot be listed on a PTO Form 1449 due to a lack of a date of publication. However, some have matured into U.S. Patents. In any case, these application disclosures have been considered: 08/743,798; 08/873,978; 08/899,510; 08/911,085; 09/577,429; 08/166,036; 08/475,051; 08/660,534; 08/659,987; 08/709,265; 08/709,263; 08/873,598; 09/100,507; 09/306,749; 09/306,737; 09/306,768; 09/454,498; 09/459,751; 09/459,191;

09/454,497; 09/458,187; 09/545,227; 09/602,618; 09/845,746;
09/866,067; 08/312,388; 08/786,187; 09/296,111; 09/296,078;
09/915,187; 08/786,153; 08/804,883; 08/843,623.

The citation P to PCT/WO 93/102675/27 was lined through on the PTO Form 1449 due to lacking a date of publication as required on such forms.

No claim is allowed.


Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703)308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703)308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703)308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst, Tina Plunkett, whose telephone number is (703)305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

June 28, 2002


ARDIN H. MARSCHEL
PRIMARY EXAMINER